UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,779	08/14/2006	Stefan Butenweg	2003P11427WOUS	7744

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EXAMINER
ABDALLA, KHALID M

ART UNIT	PAPER NUMBER
4173	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/566,779	BUTENWEG ET AL.
	Examiner	Art Unit
	KHALID ABDALLA	4173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*31 January 2006*</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*9-15*</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>*9-15*</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
       1.☒ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>*01/31/2006*</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claim 9 is objected to because of the following informalities: in line 5 "the first

network should be the "first packet –oriented network". Appropriate correction is

required.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

3 .   Claims 9-15 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

The methods in claims (9-15) fails to fall within a statutory category of

invention they are directed to a software logic which is non- statutory subject matter. For

a method claim to satisfy the 35 U.S.C. 101, it must (1) be tied to another statutory class

or (2) transform the underlying subject matter. Claims (9-15) are not tied to another

statutory class and do not transform the underlying subject matter.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leddy

et al (US 20020184393 A1) in view of YU (US 20030223364 A1).Hereinafter referred to

as Leddy and YU respectively.

    Regarding claim 9, Leddy discloses a method for inter-domain routing

(Classless Inter Domain Routing see [0018]) between packet-oriented communications

networks, comprising:

distributing communications traffic over a plurality of inter-domain links by a first node

(RIX see FIG2) of a first packet-oriented network, the traffic to be transmitted to a

destination outside of the first network   (internetwork paths have been selected for

outbound traffic see [0018] and [0024]).

    Leddy does not discloses the calculating of an alternative path between the network

and a second packet-oriented network via a first node of the first network, wherein the

calculation is used by the first node and a edge node of the second network which is

reachable via at least a portion of the inter-domain links wherein the inter-domain links

connect the first network to the network in which the traffic is forwarded to the

destination.

However YU teaches the calculating of an alternative path (multiple class-specific

entries see [0011])between the network and a second packet-oriented network via a

first node of the first network , wherein the calculation (comparing unit see FIG 3 for

p[roviding values to tha CAM see [003] and [0026]) is used by the first node and a edge

node (Ethernet switch/router see [0024]) of the second network which is reachable via

at least a portion of the inter-domain links (six port interfaces see FIG2) wherein the

inter-domain links connect the first network to the network in which the traffic is

forwarded to the destination (traffic distribution and traffic distribution policy

[0010],[0011],[002] and abstract). Thus it would have been obvious to one of ordinary

skill in the art at the time the invention was made to use and modify the method of

Leddy and couple with traffic distribution and policy taught by YU in order to distribute

and forward traffic.

Regarding claim 10, Leddy discloses a method for determining paths for multipath

routing between a first packet-oriented communications network and a plurality of

further packet-oriented communications networks (internetwork paths for outbound

traffic see abstract), comprising:

distributing packets over a plurality of links (groups of networks see [0005]), each of the

links connecting the first network to one of the further networks via a further node

(Ethernet switch/router see [0024]) of the respective further network (internetwork paths

have been selected for outbound traffic see [0018] and [0024]).

Leddy does not discloses calculating the paths for routing to a destination outside

the first packet-oriented network by combining the further nodes capable of routing to

the destination to form a single virtual node: and

calculating a distribution weighting for routing to the destination by using the single

virtual node.

However YU teaches calculating the paths for routing to a destination outside the first packet-oriented network by combining the further nodes capable of routing to the destination to form a single virtual node (comparing unit see FIG 3 also see traffic distribution and traffic distribution policy [0011],[0024] and abstract); and calculating a distribution weighting for routing to the destination by using the single virtual node(CAM array within a network node to support traffic forwarding see [0005] also see traffic distribution [0010] and [0011]). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use and modify the method of Leddy and couple with traffic distribution and CAM array taught by YU in order to distribute and forward traffic accordingly..

Regarding claim 11, note that YU teaches a method comprising: specifying a plurality of nodes (Ethernet switch/router see [0024]) of the first network from which the traffic can be Forwarded to the destination (the network node forward traffic see [0024]), and splitting traffic within the first network among the specified nodes (traffic entering node distributed to a multiple interfaces see [0007] and traffic distribution and traffic distribution policy [0010],[0011],[0024] and FIG 2 and abstract).

Regarding claim 12, note that YU teaches the method, wherein splitting is Performed by distributing of paths (traffic entering node distributed to a multiple interfaces see [0007] within the network and traffic distribution and traffic distribution policy [0010],[0011],[0024] and FIG 2 and abstract).

Regarding claim 13 note that YU teaches the method according to claim 11, wherein splitting is performed by distributing the traffic over different Multiprotocol Label Switching paths leading to the selected nodes (CAM array and class specific entry , which is labeled protocol , the payload described as being formatted according to MPLS see [0038] also [0040]).

Regarding claim 14 note that YU teaches the method, wherein splitting is performed by distributing the traffic(traffic entering node distributed to a multiple interfaces see [0007] and traffic distribution and traffic distribution policy [0010],[0011],[0024] and FIG 2 and abstract).
over different Multiprotocol Label Switching paths (traffic entering node distributed to a multiple interfaces see [0007])leading to the selected nodes (traffic classified at the network nodes using the key field see [0042] and key field format of PPP: MPLS see [0043]).

Regarding claim 15, note that Leddy discloses the method, wherein a service affecting event of the links causes a re-distribution of traffic over the links to counteract the event (traffic to be shifted off and the best route paths see [0012] also see best route decision [0017]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is

(571)270-7526. The examiner can normally be reached on MONDAY THROUGH

EVERY OTHER FRIDAY 7 AM TO 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, JINHEE LEE can be reached on 571-272-1977. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. A./
Examiner, Art Unit 4173

/Jinhee J Lee/
Supervisory Patent Examiner, Art Unit 4173